

## REMARKS

Claims 1-24 and 26-29 are currently pending. Claims 7-8 and 20-21 have been amended and claims 26-29 are new.

### Claim Amendments

Claims 7 and 20 have been amended to recite that the acquisition layer lies between the first surface of the storage layer and the liquid permeable upper surface. Support for this amendment may be found throughout the specification and at least at Figure 2.

Claims 8 and 21 have been amended to recite that the first storage layer lies between the acquisition layer and the liquid permeable upper surface. Support for this amendment may be found throughout the specification and at least at paragraph [0018].

### Art Rejections - Bernardin in view of Guidotti

Claims 1-4, 7-9, 14, 15 and 19-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bernardin (USPN 5,009,650) in view of Guidotti (USPN 6,037,518). Applicants respectfully traverse this rejection.

### Superabsorbents

Claim 1 recites that the first storage layer comprises at least 50 percent by weight of a super absorbent material calculated on the total weight of the first storage layer.

Claim 16 recites that the first storage layer comprises a super absorbent material.

Bernardin does not teach or suggest each feature of the presently claimed invention, as set forth in representative claims 1 and 16. For example, Bernardin does not teach or suggest that a first storage layer contains superabsorbent material.

The Examiner asserts that first high density component 10 allegedly corresponds to the presently claimed first storage layer. See Figure 7 of Bernardin.

The Examiner then alleges that it would have been obvious to one of ordinary skill in the art to include superabsorbent in the first high density component 10 of Bernardin. Respectfully, this is wrong.

Not only would one skilled in the art not have been motivated as such, one skilled in the art would have been taught away from including superabsorbent in the first high density component 10. Bernardin teaches that when superabsorbent is included in the Bernardin diaper, it is incorporated as a separate layer 9. See Figure 7. The superabsorbent layer 9 is placed between the first and second high density components 10, 11. Bernardin teaches that the purpose for sandwiching the superabsorbent layer 9 between the first high density component 10 and the second high density component 11 is so that liquid waste is brought into contact with an upper and lower surface of the superabsorbent layer 9, rather than across a bottom edge thereof. See column 5, lines 16-24.

Thus, Bernardin teaches that the superabsorbent should always be sandwiched between the alleged first storage layer and another high density layer. Thus, the alleged first storage layer is specifically taught not to be a superabsorbent layer. Accordingly, one skilled in the art would not be motivated to modify Bernardin in order to make the alleged first storage layer (first high density component 10) to include superabsorbents.

Accordingly, Bernardin in view of Guidotti does not teach or suggest each feature of the presently claimed invention.

#### Density

Claim 1 recites that the first storage layer in a dry condition has a density exceeding  $0.4 \text{ g/cm}^3$ . The Examiner has alleged that Bernardin teaches the alleged first storage layer (first high density component 10) teaches a density of between  $0.14\text{-}0.3 \text{ g/cm}^3$ . The Examiner has further alleged that it would be obvious to increase the density taught by Bernardin to the claimed level ( $0.4 \text{ g/cm}^3$ ) because Bernardin teaches that such high-density layers acquire and hold waste so as to prevent leakage. With due respect, this is a non sequitur.

The Examiner cannot say that of skill in the art (the Bernardin inventors) have specified a particular range of density that properly works for their claimed invention, and then say that those same teachings motivate one to go outside that range. That is not proper. Bernardin has given a range and it is improper to rely on Bernardin for support to go outside that range.

Moreover, Bernardin teaches away from going outside the disclosed range. Bernardin teaches that the disclosed range provides for a proper balance of the desired capillarity without excessive stiffness. See column 5, lines 53-57. Thus, implicitly, Bernardin teaches that a density above that range will be too stiff and not have enough capillarity. Accordingly, one skilled in the art would not be motivated to make the significant jump up to the claimed level of  $0.4 \text{ g/cm}^3$ .

Accordingly, Bernardin in view of Guidotti does not teach or suggest each feature of the presently claimed invention.

#### Apertures or Recesses

The Examiner is reminded that "During patent examination, the pending claims must be 'given their broadest **reasonable** interpretation **consistent with the specification**.'" MPEP § 2111 (emphasis added). Claim terms should not be given an arbitrarily broad interpretation based on any possible context. Further, it is not the broadest possible interpretation, but the broadest reasonable interpretation.

In the presently claimed invention, the Examiner has asserted that the "apertures or recesses" are taught by pores of the dense material. This is not **reasonable** and is not **consistent with the specification**. While the Examiner's assertion is very creative, it is not proper. It is clear from a reading of applicants' specification that the apertures or recesses are significant hollow spaces. The first storage layer typically absorbs liquid slowly due to its design as a storage layer. The spaces are provided, therefore, to hold or channel liquid whilst the first storage layer uptakes/absorbs liquid. See paragraphs [0013]-[0015] and [0032]. The apertures or recesses are thus real, physical features within the first storage layer and not simply pores of the first storage layer.

This is a reasonable interpretation. This interpretation is consistent with the specification. Thus, the Examiner is requested to review the specification and reconsider the assertion that "apertures or recesses" are taught by pores of the dense material.

#### Claim 2

Claim 2 recites that the first storage layer in a dry condition has a density exceeding  $0.5 \text{ g/cm}^3$ . The Examiner has alleged that it would be obvious to increase

the density taught by Bernardin ( $0.14\text{--}0.3\text{ g/cm}^3$ ) to the claimed level ( $0.5\text{ g/cm}^3$ ) because Bernardin teaches that such high-density layers acquire and hold waste so as to prevent leakage.

In addition to the arguments made above with regard to claim 1, applicants assert that the Examiner is maintaining a jump from 0.3 to 0.5. This is a 66% increase over what was disclosed in Bernardin. Applicants respectfully assert that a 66% jump with no proper motivation is beyond reasonable. The Examiner is asked to withdraw this rejection or provide specific support in the art for such a jump.

#### Claims 4 and 19

Claim 4 recites that the apertures or recesses extend through an entire thickness of the first storage layer.

The Examiner has asserted that an aperture (a pore) extends through an entire thickness of the alleged first storage layer (first high density component 10). Applicants assert this is unreasonable. The Examiner is respectfully requested to guide applicants to support in the art for this assertion or withdraw the rejection.

#### Claims 8 and 21

Claims 8 and 21 have been amended to recite that the first storage layer lies between the acquisition layer and the liquid permeable upper surface.

The Examiner asserts that first high density component 10 allegedly corresponds to the presently claimed first storage layer. See Figure 7 of Bernardin.

The Examiner further asserts that lower density layer 5 allegedly corresponds to the presently claimed acquisition layer. See Figure 7 of Bernardin.

However, as is clear in Bernardin, layer 10 is not between the alleged acquisition layer (lower density layer 5) and the liquid permeable upper surface.

Accordingly, each feature of claims 8 and 21 have not been taught or suggested by Bernardin in view of Guidotti. This rejection is respectfully requested to be withdrawn.

#### Claim 9

Claim 9 depends from claim 8 and recites that the absorbent article comprises a liquid permeable top sheet, wherein the liquid permeable top sheet and the

acquisition layer are thermally joined in a hollow space in the first storage layer created by said apertures or recesses.

The first storage layer lies between the acquisition layer and the liquid permeable top sheet. And, the acquisition layer must pass through/between the first storage layer in order to be joined to the liquid permeable top sheet.

There is no such teaching or suggestion of this the cited art. This rejection is respectfully requested to be withdrawn.

#### Claims 14 and 22

Claim 14 recites that the absorbent structure further comprises a second storage layer containing a lower amount of super absorbent material calculated on the total weight of the storage layer than the first storage layer.

The Examiner has asserted that second high density component 11 corresponds to the second storage layer. See Figure 7 of Bernardin.

The Examiner has asserted that it would be obvious to one of ordinary skill in the art to include superabsorbent in second high density component 11. As with first high density component 10, this is wrong.

Not only would one skilled in the art not have been motivated as such, one skilled in the art would have been taught away from including superabsorbent in the first high density component 10. Bernardin teaches that when superabsorbent is included in the Bernardin diaper, it is incorporated as a separate layer 9. See Figure 7. The superabsorbent layer 9 is placed between the first and second high density components 10, 11. Bernardin teaches that the purpose for sandwiching the superabsorbent layer 9 between the first high density component 10 and the second high density component 11 is so that liquid waste is brought into contact with an upper and lower surface of the superabsorbent layer 9, rather than across a bottom edge thereof. See column 5, lines 16-24.

Thus, Bernardin teaches that the superabsorbent should always be sandwiched between the alleged first storage layer and the alleged second storage layer. Thus, the alleged first storage layer is specifically taught not to be a superabsorbent layer. Accordingly, one skilled in the art would not be motivated to modify Bernardin in order to make the alleged second storage layer (second high density component 11) to include superabsorbents.

Accordingly, Bernardin in view of Guidotti does not teach or suggest each feature of the presently claimed invention.

Claims 15 and 23

Claim 15 recites that the absorbent structure further comprises a second storage layer and the second storage layer partly or entirely encloses the first storage layer.

The Examiner admits that Bernardin does not teach that the alleged second storage layer (second high density component 11) partly or entirely encloses the alleged first storage layer (first high density component 10).

The Examiner appears to rely on improper hindsight reconstruction in alleging that one skilled in the art would be motivated to modify Bernardin to arrive at the presently claimed invention. The Examiner is respectfully requested to guide applicants to support in the art for this assertion or withdraw the rejection.

Bernardin in view of Guidotti Conclusion

Accordingly, applicants respectfully request that the rejection of claims 1-4, 7-9, 14, 15 and 19-23 as being unpatentable over Bernardin in view of Guidotti be withdrawn.

**Art Rejections - Bernardin in view of Lassen**

Claims 5 and 6 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Bernardin (USPN 5,009,650) in view of Lassen (US Pat App Pub No 2002/0013563). Applicants respectfully traverse this rejection.

Claims 5 and 6 depend from claim 1.

Bernardin does not teach or suggest each feature of the presently claimed invention. For example, Bernardin does not teach or suggest that a first storage layer contains superabsorbent material. Lassen does not remedy this deficiency.

Clearly, the combination of Bernardin in view of Lassen does not teach or suggest the presently claimed invention.

Further, if the Examiner were to assert a combination of Bernardin in view of Guidotti in view of Lassen, applicants have highlighted a number of deficiencies of the Bernardin in view of Guidotti combination that are not remedied by Lassen.

Accordingly, applicants respectfully request that the rejection of claims 5 and 6 as being unpatentable over Bernardin in view of Lassen be withdrawn.

**Art Rejections - Bernardin in view of Berg**

Claims 10 and 12 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Bernardin (USPN 5,009,650) in view of Berg (USPN 5,180,622). Applicants respectfully traverse this rejection.

Claims 10 and 12 depend from claim 1.

The combination of Bernardin in view of Berg does not teach or suggest the presently claimed invention.

Further, if the Examiner were to assert a combination of Bernardin in view of Guidotti in view of Berg, applicants have highlighted a number of deficiencies of the Bernardin in view of Guidotti combination that are not remedied by Berg.

Further, claim 10 recites that the acquisition layer is a polyacrylate based super absorbent foam material.

The Examiner has alleged that Berg teaches a polyacrylate based super absorbent foam material and that one would be motivated to use the polyacrylate based super absorbent foam material in the alleged acquisition layer (lower density layer 5). However, lower density layer 5 is specifically designed in Bernardin to transfer waste fluid to the higher density component 10. See column 3, lines 25-29. And, as applicants have noted above, higher density layer 10 does not contain superabsorbent.

Thus, the proposed modification would put a superabsorbent foam (modified lower density layer 5) on a non superabsorbent layer (higher density component 10). This proposed modification would not properly transfer liquid from the lower density layer 5 to the higher density component 10. This is directly against the teachings of Bernardin. Accordingly, one skilled in the art would not make this modification.

Accordingly, applicants respectfully request that the rejection of claims 10 and 12 as being unpatentable over Bernardin in view of Berg be withdrawn.

**Art Rejections - Bernardin in view of Berg in view of Shepard**

Claim 11 stands rejected under 35 U.S.C § 103(a) as being unpatentable over Bernardin (USPN 5,009,650) in view of Berg (USPN 5,180,622) in view of Shepard (USPN 6,869,659). Applicants respectfully traverse this rejection.

Claim 11 depends from claim 1.

The combination of Bernardin in view of Berg in view of Shepard does not teach or suggest the presently claimed invention.

Further, if the Examiner were to assert a combination of Bernardin in view of Guidotti in view of Berg in view of Shepard, applicants have highlighted a number of deficiencies of the Bernardin in view of Guidotti combination that are not remedied by Berg and/or Shepard.

Further, claim 11 recites that the foam material of the acquisition layer exhibits a Gurley stiffness value lower than 1000 mg and a density in a dry condition exceeding  $0.5 \text{ g/cm}^3$ .

The Examiner has alleged that Shepard teaches a foam for the backing of a loop material for a fastening device with the claimed foam properties. Then, the Examiner alleges that one skilled in the art would have been motivated by the foam of Shepard to modify the foam of the alleged acquisition layer (lower density layer 5).

However, it is unreasonable to assert that one skilled in the art would modify the highly specialized foam of an acquisition layer by teaching of a foam for the backing of a loop fastener. This is not proper. One skilled in the art would not turn to or look to teachings of a support/backing layer to modify a specialized absorption layer.

Accordingly, applicants respectfully request that the rejection of claim 11 as being unpatentable over Bernardin in view of Berg in view of Shepard be withdrawn.

**Art Rejections - Bernardin in view of McBride**

Claim 13 stands rejected under 35 U.S.C § 103(a) as being unpatentable over Bernardin (USPN 5,009,650) in view of McBride (US Pat App Pub No 2004/0019340). Applicants respectfully traverse this rejection.

Claim 13 depends from claim 1.

The combination of Bernardin in view of McBride does not teach or suggest the presently claimed invention.



Further, if the Examiner were to assert a combination of Bernardin in view of Guidotti in view of McBride, applicants have highlighted a number of deficiencies of the Bernardin in view of Guidotti combination that are not remedied by McBride.

Accordingly, applicants respectfully request that the rejection of claim 13 as being unpatentable over Bernardin in view of McBride be withdrawn.

### **New Claims**

New claims 26 and 28 depend from claims 1 and 16, respectively, and recite that the apertures or recesses are in the form of longitudinal channels adapted to direct liquid in a direction towards the end portions of the absorbent structure.

Support for these claims may be found throughout the specification and at least at paragraph [0013].

Claims 26 and 28 are patentable over the cited art for at least the same reasons as claims 1 and 16. Further, the cited art does not teach or suggest that the apertures or recesses are in the form of longitudinal channels adapted to direct liquid in a direction towards the end portions of the absorbent structure. Instead, the Examiner has only alleged that pores correspond to the apertures or recesses. Clearly, pores do not teach or suggest the presently claimed channels.

New claims 27 and 29 depend from claims 1 and 16, respectively, and recite that the apertures or recesses are spaces capable of holding liquid before the liquid is absorbed by the first storage layer.

Support for these claims may be found throughout the specification and at least at paragraph [0032].

Claims 27 and 29 are patentable over the cited art for at least the same reasons as claims 1 and 16. Further, the cited art does not teach or suggest that the apertures or recesses are spaces capable of holding liquid before the liquid is absorbed by the first storage layer. Instead, the Examiner has only alleged that pores correspond to the apertures or recesses. Clearly, pores do not teach or suggest the presently claimed spaces capable of holding liquid before the liquid is absorbed by the first storage layer.

**Conclusion**

Favorable examination and further action in the form of a Notice of Allowance is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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